

### REMARKS

Claims 1-11 and 13-15 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,517,184 to Bruch et al. The rejections are respectfully traversed.

The Bruch et al. reference discloses a method for servicing a printhead including identifying malfunctioning nozzles on the printhead during a detection operation, storing the results of the detection operation and servicing malfunctioning nozzles with a cleaner unit. The Bruch et al. reference does not, however, teach storing the results of the detection operation in a printhead memory on the printhead. Therefore, the Bruch et al. reference does not teach a printhead including “a printhead memory containing data pertaining to said nozzles of said array,” as required by the pending claims of the present application.

As the Examiner may be aware, anticipation under § 102(b) is established only if each and every limitation of a patent claim identically appears in a single prior art reference. *See Gechter v. Davidson*, 116 F.3d 1454, 1457 (Fed. Cir. 1997). Inasmuch as the Bruch et al. reference does not teach a printhead including a printhead memory on the printhead for storing data pertaining to the array of nozzles on the printhead, the Bruch et al. reference cannot, as a matter of law, anticipate the pending claims of the present application.

Assuming, *arguendo*, the Bruch et al. reference teaches storing data pertaining to nozzles of a printhead in a memory device, there is no teaching or suggestion in the Bruch et al. reference that the memory device for storing nozzle data is located on the printhead. The Examiner cites to col. 4, ll. 56-67 of the Bruch et al. reference, which makes no mention of the location of the memory device, yet alone a teaching or suggestion that the memory device is located on the printhead. Furthermore, referring to col. 11, ll. 56-58 and col. 12, ll. 1-4, the Bruch et al. reference suggests that the memory device is associated with the “drop detection unit 530” and, therefore, would not be located on the printhead.

Applicants note that at col. 24, ll. 28-30 the Bruch et al. reference teaches marking “the acumen of the pen (using one bit)” when the printhead is at an “end of life” state such that “moving [the] pen to a different printer will produce the same result.” Therefore, the Bruch et al.

reference contemplates storing a status of the overall printhead on the printhead. However, as stated previously, the Bruch et al. reference does not teach storing data pertaining to the array of nozzles on the printhead and, therefore, cannot anticipate the pending claims of the present application.

Thus, Applicants submit that the Bruch et al. reference does not teach a printhead including a housing having an array of nozzles and a printhead memory containing data pertaining to the nozzles.

Furthermore, Applicants note that storing data pertaining to the nozzles directly on the printhead provides advantages not contemplated by the prior art cited in the Office action. For example, when nozzle data is stored directly on the printhead, the printhead may be installed on any appropriate device and, upon reading the printhead memory, the device may be apprised of the nozzle data (e.g., which nozzles are missing/malfunctioning) and may function accordingly (e.g., compensate for the missing/malfunctioning nozzles).

Thus, the claimed printhead may be swapped between various print devices without the need for re-identifying missing/malfunctioning nozzles. Furthermore, the claimed printhead allows a manufacturer to store missing/malfunctioning nozzle data on the printhead such that the printhead may be installed on a print device without the need for re-identifying missing/malfunctioning nozzles, thereby improving printhead operation and reducing manufacturing costs.

Accordingly, inasmuch as the Bruch et al. reference does not teach a printhead including a printhead memory for storing data pertaining to the array of nozzles, Applicants submit that the Bruch et al. reference does not anticipate the pending claims of the present application. Withdrawal of the rejections of claims 1-11 and 13-15 is respectfully requested.

Claim 12 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Bruch et al. reference in view of U.S. Patent No. 6,719,391 to Kojima. For the reasons expressed above, the rejection of claim 12 under § 103(a) is respectfully traversed.

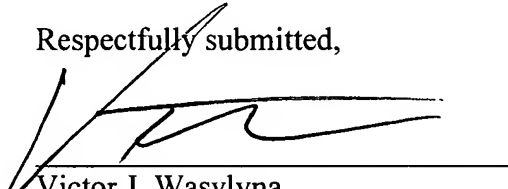
Accordingly, it is submitted that the application is in condition for allowance and formal

Serial No. 10/822,359  
Docket No. 2003-0782.02  
Response to Non-Final

notice thereof is respectfully requested.

Applicants hereby authorize the Commissioner under 37 C.F.R. § 1.136(a)(3) to treat any paper that is filed in this application, which requires an extension of time, as incorporating a request for such an extension. The Commissioner is authorized to charge any additional fees required by this paper or to credit any overpayment to Deposit Account No. 20-0809.

Respectfully submitted,



Victor J. Wasylyna  
Reg. No. 52,345

THOMPSON HINE LLP  
P.O. Box 8801  
Dayton, Ohio 45401-8801  
PH (937) 443-6812  
E-mail: IPGroup@ThompsonHine.com

428715.1